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10/17/2001

Steve Dispensa

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04/24/2006

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EXAMINER

PATEL, ASHOKKUMAR B

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/981,165	<b>Applicant(s)</b> DISPENSA ET AL.
	<b>Examiner</b> Ashok B. Patel	<b>Art Unit</b> 2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. Claims 1-24 are subject to examination.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/28/2006 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1, 9, and 17 have been considered but are moot in view of the new ground(s) of rejection. However, Examiner would like to point out the following:

Applicant has correctly interpreted the teachings of Hansen (US 6, 697, 871) as "the Office Action equating the network analyzing agent 214 with the RMON probe referred to in claim 1, the remote distributed-network analyzing console 204 with the RMON manager and the RMON database referred to in claim 1, and the distributed-network analyzing console 202 with the performance management system claimed in claim 1.

Also, Examiner would like to point out that Hansen teaches: at col. 7, line 21-45," In one embodiment, the monitoring activities are a subset of the remote monitoring (RMON) standard. This standard provides managers with real-time network and

Art Unit: 2154

application data. Within the RMON standard, probes located in network devices such as hubs, routers, and switches collect and maintain historical information. The network management console does not need to constantly pull probes in order to ensure that historical information is properly collected. **Within the RMON scheme, the probes are servers and the management console is the client in the client/server relationship. Simple network management protocol (SNMP) provides the communication layer for transmitting information between RMON probes and management consoles.**

RMON notifies the user that problems exist. In one version, the RMON standard addresses only the physical layers of a network such as physical layer 610 and data link layer 608 (the basic connectivity of cables, hubs and related devices). In this version, RMON does not provide any information concerning the network layer 606, transport layer 604 or applications layer 602. A later version, **RMON2, provides information all the way up through the application layer 602.** Although RMON and RMON2 provide detailed information concerning network traffic, neither provide the tools necessary for the analysis of the data and efficient means for maintaining the MIB 420. “, and at col. 5, line 33-53,” Network monitoring in analysis applications maintained within distributed-network analyzing console 202 and remote distributed-network analyzing console 204 detect, diagnose, and isolate potential problems on the network. For a series of processing functions, these applications help systems managers determine appropriate corrective action. Performance management tools offer a variety of capabilities such as baselining networks, analyzing network utilization and trends, and identifying

Art Unit: 2154

performance bottlenecks. In addition, any of a variety of performance management tools may be implemented. Fault and performance management systems interpret major LAN 206 and WAN 212 protocols used throughout the enterprise including encapsulating LAN protocols over leased lines, frame relay and X.2.5 for example. In addition, fault performance management locates problems, identifies unique Internet work characteristics, and uses expert analysis to automatically recommend quick problem resolution. In addition, the tools display complete protocol interpretation in clear, concise languages and provide Internet work bandwidth statistics that indicate utilization based on LAN protocols as well as end users."

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 9 and 17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Referring to claim 1,**

Claim 1 recites "a performance management system". The rest of the claim limitations are driven towards gathering (requests and receives) the information from various devices in the network. Examiner is at a loss in understanding the claim limitations' relevance to "a performance management system."

**Referring to claim 9,**

Art Unit: 2154

Claim 9 recites "operating a probe device for testing". The rest of the claim limitations are driven towards gathering (requests and receives) the information from various devices in the network. Examiner is at a loss in understanding the claim limitations' relevance to "testing."

**Referring to claim 17,**

Claim 17 recites "a RMON management system". The rest of the claim limitations are driven towards gathering (requests and receives) the information from various devices in the network. Examiner is at a loss in understanding the claim limitations' relevance to "a RMON management system."

**Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (US 6, 697,871 B1) in view of William Stallings (hereinafter Stallings)( William Stallings, SNMP,SNMPv2,SNMPv3, and RMON 1 and 2, Third Edition, 1999, Addison-Wesley,Third Edition, pages 209-215 )

**Referring to claim 1,**

Hansen teaches a method of operating a performance management system (Fig.2, col. 5, line 33-53," Network monitoring in analysis applications maintained within distributed-

Art Unit: 2154

network analyzing console 202 and remote distributed-network analyzing console 204 detect, diagnose, and isolate potential problems on the network. For a series of processing functions, these applications help systems managers determine appropriate corrective action. Performance management tools offer a variety of capabilities such as baselining networks, analyzing network utilization and trends, and identifying performance bottlenecks. In addition, any of a variety of performance management tools may be implemented. Fault and performance management systems interpret major LAN 206 and WAN 212 protocols used throughout the enterprise including encapsulating LAN protocols over leased lines, frame relay and X.2.5 for example. In addition, fault performance management locates problems, identifies unique Internet work characteristics, and uses expert analysis to automatically recommend quick problem resolution. In addition, the tools display complete protocol interpretation in clear, concise languages and provide Internet work bandwidth statistics that indicate utilization based on LAN protocols as well as end users.”), the method comprising:

- a Remote Monitoring (RMON) probe; (Fig.2, "network Analyzing Agent", col. 5, line 15-32, line 66 through col. 6, line 3);

- a RMON manager configured to access the RMON probe to request the RMON information; (Fig. 2, element 204, col. 5, line 15-32, line 66 through col. 6, line 3)

- a RMON database configured to be accessed by the RMON manager to request the RMON information; (Fig. 2, element 204 and 202, col. 5, line 15-32, line 66 through col. 6, line 3)

Although Hansen clearly states and teaches at col. 7, line 21-45," In one embodiment, the monitoring activities are a subset of the remote monitoring (RMON) standard. This standard provides managers with real-time network and application data. Within the RMON standard, probes located in network devices such as hubs, routers, and switches collect and maintain historical information. The network management console does not need to constantly pull probes in order to ensure that historical information is properly collected. Within the RMON scheme, the probes are servers and the management console is the client in the client/server relationship. Simple network management protocol (SNMP) provides the communication layer for transmitting information between RMON probes and management consoles." however, Hansen does not expressly disclose the performance management system generating and transmitting a first instruction for a Remote Monitoring (RMON) probe to request a first portion of RMON information ; receiving and storing the first portion of RMON information in memory in the performance management system; generating and transmitting a second instruction for an RMON manager configured to access the RMON probe to request a second portion of the RMON information; receiving and storing the second portion of the RMON information in the memory in the performance management system; generating and transmitting a third instruction for an RMON database configured to be accessed by the RMON manager to request a third portion of the RMON information; and receiving and storing the third portion of the RMON information in memory in the performance management system.



Stallings teaches the performance management system at page 212, Fig. 8.1. Stallings teaches at page 214, "As Figure 8.1 illustrates, an RMON probe may be subject to management from multiple management stations. Any- time concurrent access is allowed to a resource, there is a potential for conflict and unwanted results. In the case of a shared RMON probe, the following difficulties may arise.

1. Concurrent requests for resources could exceed the capability of the monitor to supply those resources.
2. A management station could capture and hold monitor resources for a long period of time, preventing their use for other desired management functions by other management stations.
3. Resources could be assigned to a management station that crashes without releasing the resources.

To deal with these problems, a combination of avoidance and resolution features are needed. It turns out that a relatively simple feature embedded in the RMON MIB supports these requirements. Associated with each control table is a columnar object that identifies the owner of a particular row of the table and of the associated function. The ownership label can be used in the following ways.

1. A management station may recognize resources it owns and no longer needs.
2. **A network operator can identify the management station that**

**owns a particular resource or function and negotiate for the resource or function to be freed.**

**3. A network operator may have the authority unilaterally to free resources another network operator has reserved.**

4. If a management station experiences a reinitialization, it can recognize resources it had reserved in the past and free those it no longer needs.

The RMON specification suggests that the ownership label contain one or more of the following: IP address, management station name, network manager's name, location, or phone number.

Although the ownership concept is useful, it is important to note that the ownership label does not act as a password or access-control mechanism. Access control is enforced in SNMP only through the use of the MIB view mechanism associated with the community name. Thus, if a control table has read-write access, it is available for reading and writing by all management stations for which the table is visible in their MIB view. In general, a row of a control table should be altered or deleted only by its owner and read only by other management stations. The enforcement of this convention is beyond the scope of SNMP or the RMON specification. (Thus teaches the performance management system generating and transmitting a first instruction for a Remote Monitoring (RMON) probe to request a first portion of RMON information; receiving and storing the first portion of RMON

information in memory in the performance management system; generating and transmitting a second instruction for an RMON manager configured to access the RMON probe to request a second portion of the RMON information; receiving and storing the second portion of the RMON information in the memory in the performance management system; generating and transmitting a third instruction for an RMON database configured to be accessed by the RMON manager to request a third portion of the RMON information; and receiving and storing the third portion of the RMON information in memory in the performance management system.”)

Therefore, it would have been obvious to one of ordinary skill in this art at the time the invention was made to use this RMON features for Hansen since, as Stallings teaches at page 215, “If multiple network managers have access to a control table, some efficiencies can be achieved by sharing. When a management station wishes to utilize a certain function **(portion)** in a monitor, it should first scan the relevant control table to see if that function, or some thing close to that function, has already been defined by another management station. In this case the management station may “share” the function by simply observing the corresponding read-only data rows associated with the control row.

**Referring to claim 2,**

Hansen teaches the method of claim 1 wherein the RMON information comprises datalink layer information. (col . 7, line 34-42).

**Referring to claim 3,**

Art Unit: 2154

Hansen teaches the method of claim 1 wherein the RMON information comprises application layer information. (col. 7, line 34-42).

**Referring to claim 4,**

Hansen teaches the method of claim 1 wherein the RMON information is based on a media access control address. (col. 7, line 34-42).

**Referring to claim 5,**

Hansen teaches the method of claim 1 wherein the RMON information comprises a number of users. (col. 5, line 47-53).

**Referring to claims 6, 7 and 8,**

Hansen teaches the method of claim 1 wherein the RMON information comprises a number of bytes transmitted, and wherein the RMON information comprises download speed, and wherein the RMON information comprises bits per second. (col. 7, line 47-53, col. 5, line 47-53)

**Referring to claim 9,**

Claim 9 is a claim to software product on a software storage medium storing instructions to carry out the method of claim 1 . Therefore claim 9 is rejected for the reasons set forth for claim 1 .

**Referring to claim 10,**

Claim 10 is a claim to software product on a software storage medium storing instructions to carry out the method of claim 2. Therefore claim 10 is rejected for the reasons set forth for claim 2.

**Referring to claim 11,**

Art Unit: 2154

Claim 11 is a claim to software product on a software storage medium storing instructions to carry out the method of claim 3. Therefore claim 11 is rejected for the reasons set forth for claim 3.

**Referring to claim 12,**

Claim 12 is a claim to software product on a software storage medium storing instructions to carry out the method of claim 4. Therefore claim 12 is rejected for the reasons set forth for claim 4.

**Referring to claim 13,**

Claim 13 is a claim to software product on a software storage medium storing instructions to carry out the method of claim 5. Therefore claim 13 is rejected for the reasons set forth for claim 5.

**Referring to claims 14, 15 and 16,**

Claims 14, 15 and 16 are claims to software product on a software storage medium storing instructions to carry out the method of claims 6, 7 and 8. Therefore claims 14, 15 and 16 are rejected for the reasons set forth for claims 6, 7 and 8.

**Referring to claim 17,**

Claim 17 is a claim to Remote monitoring management system adapted to carry out the Method of claim 1. Therefore claim 17 is rejected for the reasons set forth for claim 1 .

**Referring to claim 18,**

Claim 18 is a claim to Remote monitoring management system adapted to carry out the method of claim 2. Therefore claim 18 is rejected for the reasons set forth for claim 2.

**Referring to claim 19,**

Art Unit: 2154

Claim 19 is a claim to Remote monitoring management system adapted to carry out the method of claim 3. Therefore claim 19 is rejected for the reasons set forth for claim 3.

**Referring to claim 20,**

Claim 20 is a claim to Remote monitoring management system adapted to carry out the method of claim 4. Therefore claim 20 is rejected for the reasons set forth for claim 4.

**Referring to claim 21,**

Claim 21 is a claim to Remote monitoring management system adapted to carry out the method of claim 5. Therefore claim 21 is rejected for the reasons set forth for claim 5.

**Referring to claims 22, 23 and 24,**

Claims 22, 23 and 24 are claims to Remote monitoring management system adapted to carry out the method of claims 6, 7 and 8. Therefore claims 22, 23 and 24 are rejected for the reasons set forth for claims 6, 7 and 8.

***Conclusion***


**Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp  
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 JOHN FOLLANSBEE  
SUPERVISOR, PATENT EXAMINER  
TECHNOLOGY CENTER 2100